

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): High-pressure coupling device for directing media through quick-change systems in a machine table, for example such as oil, water, gas, fats and similar media, ~~whereby~~ wherein the high-pressure coupling device ~~comprises~~ comprises: a coupling device bottom part and a coupling device top part, ~~characterized by the fact that~~ the coupling bottom part is ~~provided with~~ including a firmly anchored, rigid valve screw element which creates ~~[[the]]~~ a sealing effect for delivering the medium ~~along with a~~ and a movable spring-loaded gate valve socket element while the top coupling part is provided with a movable spring-loaded valve disk element that creates ~~[[the]]~~ a sealing effect for the side of the coupling device, which is to be supplied with high-pressure medium, together with a rigid valve body element, such that a rigid valve element of one of the coupling parts actuates the spring-loaded valve element of the opposite coupling part in the high-pressure coupling device in a valve-actuating manner to form a valve arrangement when the bottom coupling part and the top coupling part are joined.

Claim 2 (currently amended): High pressure coupling device in accordance with Claim 1, ~~characterized by the fact that~~ wherein the valve arrangement between the coupling bottom part and the coupling top part is synchronous and positively controlled.

Claim 3 (currently amended): High pressure coupling device in accordance with Claim 2, ~~characterized by the fact that the~~ including means for positive control of the valve arrangement ~~sees to it that~~ such that the spring-loaded valve ~~parts~~ elements are actuated in such a way from the respective opposite part of the valve that ~~they~~ the valve elements do not begin oscillating as a result of the medium flow passing through.

Claim 4 (currently amended): High pressure coupling device in accordance with Claim 3, ~~characterized by the fact that~~ wherein flow of the medium ~~[[flow]]~~ keeps the ~~movable parts~~

spring loaded elements of the high-pressure coupling device in check, without moving them against a spring load.

Claim 5 (currently amended): High pressure coupling device in accordance with Claim 3, ~~characterized by the fact that~~ wherein the valve screw in the ~~valve~~ bottom part with an associated threaded bolt is screwed into an associated tapped hole in the coupling device bottom part and thus forms a stationary and constant abutment for ~~[[the]]~~ medium flow permeating the high pressure coupling device.

Claim 6 (currently amended): High pressure coupling device in accordance with Claim 1, ~~characterized by the fact that~~ wherein the gate valve socket in the valve bottom part is initially tensioned in the direction toward its off position with a relatively weakly mounted valve spring, whereby this spring only has to overcome the friction of ~~[[the]]~~ a gasket at ~~[[the]]~~ an inner area of ~~[[the]]~~ a pipe body, in order to place the gate valve socket in its off position.

Claim 7 (currently amended): High pressure coupling device in accordance with Claim 1, ~~characterized by the fact that~~ wherein in the region of ~~[[the]]~~ a ring extension of the gate valve socket a transverse ~~ventilation~~ vent hole is present.

Claim 8 (currently amended): High pressure coupling device in accordance with Claim 7, ~~characterized by the fact that~~ wherein the gate valve socket is sealed via a long sealing path, once in the region of its ring extension directed radially outward and secondly in its radially offset cylindrical region, in which ~~[[the]]~~ a gasket is arranged.

Claim 9 (currently amended): High pressure coupling device in accordance with Claim 1, ~~characterized by the fact that~~ wherein the coupling device top part consists essentially of a valve flange which is fixed in an associated recess to ~~[[the]]~~ an underside of ~~[[the]]~~ a workpiece pallet by means of screws, so that an excellent centering of the coupling device top part in this recess is achieved.

Claim 10 (currently amended): High pressure coupling device in accordance with Claim 1, ~~characterized by the fact that~~ wherein the spring-loaded valve ~~[[body]]~~ element in the coupling device top part can be optionally blocked or released, as a result of which the high-pressure coupling device can be operated either positively controlled or non-positively controlled.

Claim 11 (currently amended): High pressure coupling device in accordance with Claim 1, ~~characterized by the fact that~~ wherein the coupling device bottom part is fastened with clamp screws, ~~whereby these clamp screws are~~ screws screwed in directly through ~~[[the]]~~ a cover into ~~[[a]]~~ the machine table.

Claim 12 (currently amended): High pressure coupling device in accordance with Claim 11, ~~characterized by the fact that the screw~~ wherein each of the screws is connected with a clamping shoe, which positively engages in ~~[[the]]~~ an associated pipe body of the coupling device bottom part and with it clamps the coupling device bottom part on the machine table.

Claim 13 (currently amended): High pressure coupling device in accordance with Claim 12, ~~characterized by the fact that~~ wherein two said clamp screws with eccentrically rotating clamping shoes hold the pipe body.

Claim 14 (currently amended): High pressure coupling device in accordance with Claim 13, ~~characterized by the fact that~~ wherein a further clamp screw ~~exhibits~~ includes a circular disk, which also engages in an associated groove on the periphery of the pipe body of the coupling device bottom part.

Claim 15 (currently amended): High pressure coupling device in accordance with Claim 14, ~~characterized by the fact that the~~ wherein each said clamping shoe can be freely rotated by means of a corresponding screw and with it can be disengaged from its engaged position with the associated groove in the pipe body and vice versa.

Claim 16 (currently amended): High pressure coupling device in accordance with Claim 11, ~~characterized by the fact that~~ wherein the entire coupling device bottom part is installed in a recess in the machine table that is countersunk and open ~~to the top, so that the~~ so that a pipe body belonging to the coupling device bottom part fits positively in this recess with ~~the~~ corresponding stop edges and is protected from corresponding deformation.

Claim 17 (currently amended): High pressure coupling device in accordance with ~~Claim 11,~~ Claim 16, ~~characterized by the fact that~~ wherein a corresponding radial clearance to the associated peripheral surfaces in ~~[[the]]~~ a recess in the cover exists, so that no transmission of load takes place there between the pipe body of the coupling device bottom part to the cover.

Claim 18 (currently amended): High pressure coupling device in accordance with Claim 17, ~~characterized by the fact that~~ wherein a thermal expansion clearance is ~~guaranteed~~ provided for the pipe body in the region of the recess in the cover.

Claim 19 (currently amended): High pressure coupling device in accordance with Claim 18, ~~characterized by the fact that the~~ including a gap between the coupling device bottom part and the recess in the cover of ~~[[the]]~~ a rapid-action clamping cylinder ~~[[thus]]~~ that prevents an undesirable heat transfer to this cover and with it also ~~[[an]]~~ undesirable deformation ~~[[work]]~~ action on the rapid-action clamping cylinder, which otherwise could become distorted and cause inaccurate machining on ~~[[the]]~~ workpieces clamped on ~~[[the]]~~ a workpiece pallet.

Claim 20 (currently amended): High pressure coupling device in accordance with Claim 19, ~~characterized by the fact that~~ wherein the gap is cooled with blast air in order to prevent a thermal expansion of the coupling device bottom part.

Claim 21 (currently amended): High pressure coupling device in accordance with Claim 1, ~~characterized by the fact that the~~ wherein a front portion of the valve body element in the coupling device top part protruding from ~~[[the]]~~ a recess bears a gasket on its front with which it

rests upon ~~[[the]]~~ an associated sealing body on the coupling device bottom part in a sealing manner.

Claim 22 (currently amended): High pressure coupling device in accordance with ~~Claim 21,~~
~~characterized by the fact that~~ Claim 1, wherein the valve ~~[[body]]~~ socket element can be moved
in ~~[[the]]~~ a valve flange.

Claim 23 (currently amended): High pressure coupling device in accordance with Claim 22,
~~characterized by the fact that~~ by means of including a valve block whereby the path of
displacement of the valve body element can be blocked, so that said valve body element is
continuously held in its extended position.

Claim 24 (currently amended): High pressure coupling device in accordance with Claim 23,
~~characterized by the fact that~~ wherein in order to achieve a blocking of the valve body element a
cross hole is arranged in ~~the valve~~ a flange, in which a pinion is pivoted, which ~~exhibits~~ includes
an actuating opening for engagement of a wrench.

Claim 25 (currently amended): High pressure coupling device in accordance with Claim 24,
~~characterized by the fact that~~ wherein the pinion combs with a rack which can be moved in the
region of a transverse slot in the valve flange.

Claim 26 (currently amended): High pressure coupling device in accordance with Claim 25,
~~characterized by the fact that in~~ wherein the rotary actuation of the pinion the rack is moved
axially ~~in the direction of the arrow, or in its opposite direction,~~ as a result of which ~~[[the]]~~ an
end of the rack either engages or disengages with the ~~front of the~~ valve body element.

Claim 27 (currently amended): High pressure coupling device in accordance with Claim 26,
~~characterized by the fact that~~ wherein in the engage engaged position of the end of the rack the
valve body element is blocked in its front displacement position and can no longer be moved
against the force of ~~[[the]]~~ a spring engaging the valve body element.

Claim 28 (currently amended): High pressure coupling device in accordance with Claim 24, ~~characterized by the fact that~~ wherein the pinion bears against gaskets at its two opposing ends in order to prevent an escape of ~~[[the]]~~ pressure medium from ~~[[this]]~~ an associated region.

Claim 29 (currently amended): High pressure coupling device in accordance with Claim 23, ~~characterized by the fact that~~ wherein when ~~[[the]]~~ a valve block is disengaged, the valve body element can spring back and there is no risk of damage when ~~[[the]]~~ a workpiece pallet with the coupling device top part is placed on a smooth surface on the machine table.

Claim 30 (currently amended): High pressure coupling device in accordance with ~~Claim 23,~~ ~~characterized by the fact that~~ Claim 29, wherein when the valve block is engaged then ~~[[the]]~~ a ring extension of the valve body element extends out of ~~[[the]]~~ a recess of ~~[[the]]~~ a valve flange and hangs over this area, so that in the case of high load change impacts caused by corresponding impacts in the medium flow the valve body element can no longer lift with its gasket at the opposite surface in the coupling bottom part, as a result of which a positive locking is guaranteed, which works without spring force and therefore cannot vibrate and result in ~~self-destructions~~ self-destruction.

Claim 31 (currently amended): High pressure coupling device in accordance with Claim 1, ~~characterized by the fact that~~ wherein in the coupling device top part in ~~[[the]]~~ a transition region between ~~[[the]]~~ a tappet and ~~[[the]]~~ a bolt of larger diameter a vertical stop edge is constructed, so that an absolute straight line guide of the entire valve body element in ~~[[the]]~~ an associated bore hole is given; as a result preventing the valve body element from jamming or hammering when high pressure change impacts take place in ~~[[the]]~~ a central recess.

Claim 32 (currently amended): High pressure coupling device in accordance with Claim 1, ~~characterized by the fact that~~ wherein the valve screw ~~serewed~~ in the coupling device bottom part has a centering shoulder, with which the valve screw in the a machine table can be centered.

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Claim 33 (currently amended): High pressure coupling device in accordance with Claim 1, ~~characterized by the fact that~~ wherein the high-pressure coupling device in the machine table is arranged outside of ~~[[the]]~~ a central recess for ~~[[the]]~~ a rapid-action clamping cylinder, and in particular does not exhibit any load-transferring connection whatsoever to ~~[[the]]~~ a cover of the rapid-action clamping cylinder.